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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,539	12/02/2005	Yuji Kawamori	OGW-0405	9137

7590 03/21/2008
Patrick G. Burns - Greer, Burns & Crain, Ltd.
300 South Wacker Drive, Suite 2500
Chicago, IL 60606

EXAMINER

PARKER, FREDERICK JOHN

ART UNIT	PAPER NUMBER
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1792

MAIL DATE	DELIVERY MODE
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03/21/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/559,539

Applicant(s)

KAWAMORI, YUJI

Examiner

Frederick J. Parker

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The prior art rejections of the previous Office Action are withdrawn in view of amendments, which required the new rejections recited below:

Claim Objections

2. Claim 1 is objected to because of the following informalities: line 4, "multi-join" appears to be a new typographic error. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Bernhard et al US 4234372.

Bernhard et al teaches a method of coating the edges of glass panels (panel, by definition, implies rectangularity per claim 4) with an insulating material (which may comprise a hygroscopic medium) to maintain opposing glass panels at a defined distance, i.e. spacer material (col. 1). In the method, an applicator comprising nozzle 44 is connected to rotation device 80 and carriage 82 of a motion assembly. As shown in Fig. 11a-h and accompanying text, nozzle 44 is inactive until contacting glass panel 2, when relative speed of the nozzle increases until it approaches the end where the nozzle speed and pump drive decreases, and by 11d the pump drive is stopped; at the edge, the nozzle is reoriented 90 degrees, returned to the intended travel path

and the process repeated until all edges of the pane are coated as desired (clm 2); this is explained on col. 6, 13 to col. 7, 49 in detail. As shown in the figures, the apparatus is clearly a multi-joint robotic assembly to permit the 90 degree re-orientations and movements. The teachings expressly include stopping discharge at the corners followed by re-orientation and restarting to form a continuous, uninterrupted coating application (abstract, lines 9-14, and elsewhere).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernhart.

Bernhart is cited for the same reasons previously discussed which are incorporated herein. As to claim 3, Bernhard gives guidance as to general relative speeds as on col. 6, 36-61 and elsewhere; hence optimization by routine experimentation to maximize the movement versus speed of the applicator would have been apparent to one skilled in the art for any given application and apparatus, given the limitations of a given apparatus; as such claim 3 would have been obvious and fails to patentably distinguish over the prior art. Similarly, the relation between the facing of the discharge port and movement direction of the applicator would have varied with application, and therefore is simply a design choice for a given process, with the predictable outcome of forming a continuous, uninterrupted coating, as cited in Bernhard.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the overall process/ apparatus of Bernhard by optimizing process variable in order to achieve the outcome of forming a continuous, uninterrupted spacer coating.

7. Claims 5, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernhard in view of Biginato EP 1236599.

Bernhart is cited for the same reasons previously discussed which are incorporated herein. Use of a thermoplastic material and being applied in a layered state is not cited.

Biginato teaches a similar method for forming profiles (= spacers) on glazing of vehicle glass (rectangular in fig. 2, per claim 4) using a rotatable extrusion nozzle head mounted on a robotic drive means, and controlled by a program and /or processor. The coating material is stated to be a thermoplastic polymer [0025] which is applied as an extruded profile ("layered state") to form a spacer with improved weather sealing properties [0043].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Bernhard by utilizing the specific thermoplastic spacer/sealant of Biginato having improved water sealant properties in order to achieve the outcome of forming a continuous, uninterrupted spacer coating which prevents influx of moisture.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick J. Parker whose telephone number is 571/ 272-1426. The examiner can normally be reached on Mon-Thur. 6:15am -3:45pm, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571/272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 1792

Frederick J. Parker
Primary Examiner
Art Unit 1792

Fjp /Frederick J. Parker/
Primary Examiner, Art Unit 1792